



复旦大学数学科学学院  
**数学综合报告会**

午间学术报告会（一百八十二）

报告题目：星体演化的数学问题

报告人：林治武 教授

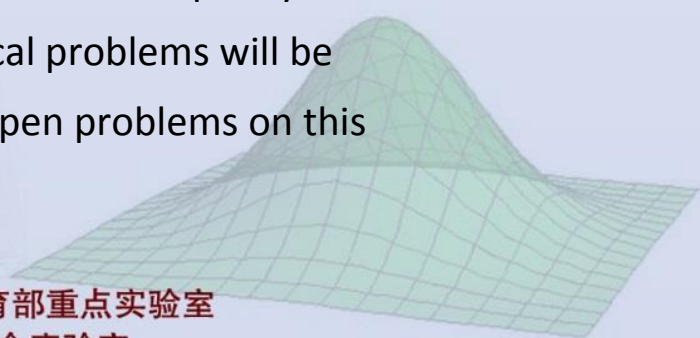
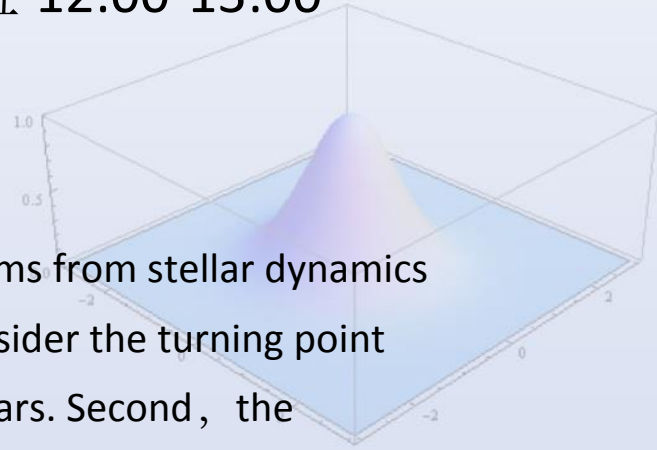
（复旦大学数学科学学院）

报告时间：2024-09-13 星期五 12:00-13:00

报告地点：光华东主楼 2201

摘要：

We will discuss a few mathematical problems from stellar dynamics for the evolution of stars. First, we will consider the turning point principle (TPP) for the stability of steady stars. Second, the dynamical issues (expanding, collapse, or oscillations) near stable or unstable stars will be discussed. Third, we will relate Chandrasekhar mass (the maximum mass of nonrotating white dwarf stars) to the optimal constant of a Hardy-Littlewood-Sobolev inequality. The implication of this relation to the dynamical problems will be discussed. Lastly, we will mention some open problems on this subject.



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